

Atty Docket No. 020752-000121US

PTO FAX NO.: 703-872-9319

ATTENTION: Examiner Kielin, Erik J.
TELEPHONE NO.: 703-306-5980

Group Art Unit 2813

OFFICIAL COMMUNICATION
FOR THE PERSONAL ATTENTION OF
EXAMINER Kielin, Erik J.

FAX RECEIVED

MAY 23 2003

TECHNOLOGY CENTER 2800

CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that the following document(s) in re Application of G. Ramanath et al., Application No. 09/977,069, filed October 11, 2001 for SELF-ASSEMBLED NEAR-ZERO-THICKNESS MOLECULAR LAYERS AS DIFFUSION BARRIERS FOR CU METALLIZATION is being facsimile transmitted to the Patent and Trademark Office on the date shown below.

Document(s) Attached

1. Trans. SB/21;
2. Fee Trans. SB/17;
3. Request for Continued Exam. (RCE);
4. Amendment; and
5. 2 sheets of drawings.

Number of pages being transmitted, including this page: 15

Dated: May 23, 2003


Dana Kane

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TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, 8th Floor
San Francisco, CA 94111-3834
Telephone: 415-576-0200
Fax: 415-576-0300

PTO/SB/17 (05-03)
Approved for use through 04/30/2003. OMB 0651-0032
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
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Complete if Known

FEE TRANSMITTAL for FY 2003

Effective 01/01/2003, Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 750

Application Number	09/977,069	FAX RECEIVED
Filing Date	October 11, 2001	
First Named Inventor	Ramensh, G.	MAY 23 2003
Examiner Name	Klein, Erik J.	
Art Unit	2813	TECHNOLOGY CENTER 2800
Attorney Docket No.	020752-000121US	

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit Account Number: 20-1430

Deposit Account Name: Townsend and Townsend and Crew LLP

The Commissioner is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments

☐ Charge any additional fee(s) during the pendency of this application

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity	Small Entity	Fee Code	Fee (\$)	Fee Description	Fee Paid
		1001	750	Utility filing fee	
		1002	330	Design filing fee	
		1003	520	Plant filing fee	
		1004	750	Reissue filing fee	
		1005	180	Provisional filing fee	
SUBTOTAL (1)					(\$)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fees from below	Fee Paid
Independent Claims			
Multiple Dependent			

Large Entity	Small Entity	Fee Code	Fee (\$)	Fee Description	Fee Paid
		1202	18	Claims in excess of 20	
		1201	84	Independent claims in excess of 3	
		1203	280	Multiple dependent claim, if not paid	
		1204	84	** Reissue independent claims over original patent	
		1205	18	** Reissue claims in excess of 20 and over original patent	
SUBTOTAL (2)					(\$)

**or number previously paid, if greater: For Reissues, see above

3. ADDITIONAL FEES

Large	Small	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	2051	130	65	Surcharge - late filing fee or oath	
1052	2052	50	25	Surcharge - late provisional filing fee or cover sheet	
1053	1053	130	130	Non-English specification	
1812	1812	2,520	2,520	For filing a request for reexamination	
1804	1804	920*	920*	Requesting publication of SIR prior to Examiner action	
1805	1805	1,840*	1,840*	Requesting publication of SIR after Examiner action	
1251	2251	110	55	Extension for reply within first month	
1252	2252	410	205	Extension for reply within second month	
1253	2253	930	465	Extension for reply within third month	
1254	2254	1,450	725	Extension for reply within fourth month	
1255	2255	1,970	985	Extension for reply within fifth month	
1401	2401	320	160	Notice of Appeal	
1402	2402	320	160	Filing a brief in support of an appeal	
1403	2403	280	140	Request for oral hearing	
1451	1451	1,510	1,510	Petition to institute a public use proceeding	
1452	2452	110	55	Petition to revive - unavoidable	
1453	2453	1,300	650	Petition to revive - unintentional	
1501	2501	1,300	650	Utility issue fee (or reissue)	
1502	2502	470	235	Design issue fee	
1503	2503	630	315	Plant issue fee	
1460	1460	130	130	Petitions to the Commissioner	
1807	1807	50	50	Petitions related to provisional applications	
1808	1808	180	180	Submission of Information Disclosure Sheet	
8021	8021	40	40	Recording each patent assignment per property (times number of properties)	
1809	2809	750	375	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	2810	750	375	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	2801	750	375	Request for Continued Examination (RCE)	750
1802	1802	900	900	Request for expedited examination of a design application	
Other fee (specify)					
*Reduced by Basic Filing Fee Paid					
SUBTOTAL (3)					(\$) 750

SUBMITTED BY

Name (Print/Type)	Patrick R. Jewell	Registration No. (Attorney/Agent)	40,458	Telephone	415-576-0200
Signature				Date	05/23/2003

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS OFFICE. For more information, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

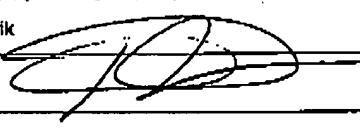
PTO/SB/21 (05-03)

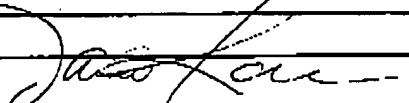
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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	09/977,069	
	Filing Date	October 11, 2001	
	First Named Inventor	Ramanath, G.	
	Art Unit	2813	
	Examiner Name	Kielin, Erik J.	
Total Number of Pages in This Submission	14	Attorney Docket Number	020752-000121US

ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input checked="" type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s)	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Fee Trans. SB/17 (1 pg.); Request for Continued Exam. (RCE) (1 pg.); Amendment (9 pgs.); Figures 4, 5 and 6, added (2 sheets).
Remarks		The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430. <div style="text-align: right;"> FAX RECEIVED MAY 23 2003 TECHNOLOGY CENTER 2800 </div>

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual	Townsend and Townsend and Crew LLP Patrick R. Jewik Reg. No. 40,456
Signature	
Date	05/23/2003

CERTIFICATE OF MAILING	
I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office, Fax No. (703) 872-9319 on May 23, 2003	
Typed or printed name	Dana Kane
Signature	
Date	05/23/2003

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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SF 1463003 v1

13/B w/Drawings
005/015
5/27/03
Mallat

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Patent and Trademark Office, Group 2800 After Final Fax at: 703-872-9319

PATENT
Attorney Docket No.: 020752-000121US

On

TOWNSEND and TOWNSEND and CREW LLP

By:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

G. Ramanath et al.

Application No.: 09/977,069

Filed: October 11, 2001

For: SELF-ASSEMBLED NEAR-ZERO-
THICKNESS MOLECULAR LAYERS
AS DIFFUSION BARRIERS FOR CU
METALLIZATION

Examiner: Kielin, Erik J.

Technology Center/Art Unit: 2813

AMENDMENT

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MAY 23 2003

TECHNOLOGY CENTER 2800

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Office Action mailed February 25, 2003, please enter the
following amendments and remarks:

Amendments to the Specification begin on page 2 of this paper.

Amendments to the Claims are reflected in the listing of claims which begins on page 3 of this
paper.

Amendments to the Drawings begin on page 6 of this paper and include an attached
replacement sheet.

Remarks/Arguments begin on page 7 of this paper.